

D. LONG-TERM STRATEGY FOR STATIONARY SOURCES

1. Regulatory History and Requirements

The Grand Canyon Visibility Transport Commission (GCVTC) studied the long-term projected changes of emissions from stationary sources. It was found that emissions of sulfur dioxide from stationary sources would decline by at least 13% between 1990 and 2000. Also, emissions of sulfur dioxide would continue to decline through 2040 when only 30% to 50% of the 1990 emission levels would remain. This decline was due to the normal turnover of source technology as older sources retire and are replaced by newer and cleaner technologies.

The GCVTC decided that the most appropriate way to address emissions of sulfur dioxide from stationary sources was to establish regional emission milestones and allow voluntary measures to achieve the emission reductions. If the emission milestones are not achieved, then a backstop market trading program would be implemented to guarantee the emission reductions are achieved. The GCVTC did not have sufficient time to develop the details of the emission milestones or backstop program, but committed to develop it and submit it to EPA.

In the Regional Haze Rule, EPA required the states to complete the development of the stationary source program for sulfur dioxide and to submit it as an Annex to the GCVTC recommendations. The WRAP submitted the Annex in September, 2000.¹ On June 5, 2003, EPA issued the final rules related to the sulfur dioxide program for stationary sources.² These rules incorporated the materials in the Annex.

2. Achievement of a 13% or Greater Reduction of Sulfur Dioxide Emissions by 2000

One item that must be included in the first implementation plan is monitoring and reporting of stationary source sulfur dioxide (SO₂) emissions. This monitoring and reporting data must be sufficient to determine whether a 13% reduction in actual stationary source SO₂ emissions has occurred between the years 1990 and 2000, and whether milestones required by Section 51.309(d)(4)(ii) have been achieved for the transport region. As shown in Table 2 taken from the Pechan report, regional SO₂ emission totals show that there was a 25% reduction in these emissions from 1990 to 2000.³ Details of the source of emission inventories used for this calculation are in the Pechan report.

¹Western Regional Air Partnership. *Voluntary Emissions Reduction Program for Major Industrial Sources of Sulfur Dioxide in Nine Western States and a Backstop Market Trading Program, An Annex to the Report of the Grand Canyon Visibility Transport Commission*. Denver, CO. September 29, 2000.

²68 FR 33764.

³E.H. Pechan & Associates, Inc. for the Western Governors' Association. *Year 2000 Point Source SO₂ Emissions Analysis - 9 State Western Region Report*. Denver, CO, May 2002.

Table 2. State-by-State Comparison of 1990 and 2000 Stationary Source Sulfur Dioxide Emissions in the 9 GCVTC Transport Region States (tons per year)

States	1990	2000
Arizona	185,398	99,133
California	52,832	38,501
Colorado	95,534	99,161
Idaho	24,652	27,763
Nevada	52,775	53,943
New Mexico	177,994	117,344
Oregon	17,705	23,362
Utah	85,567	38,521
Wyoming	136,318	124,110
Totals	828,775	621,838

3. Strategy for Stationary Sources of Sulfur Dioxide

The long-term strategy for stationary sources implements the Grand Canyon Visibility Transport Commission (GCVTC) recommendation to develop regional sulfur dioxide (SO₂) milestones and a backstop trading program to ensure that the milestone goals are achieved. The GCVTC recommendations were further refined in an Annex to the Commission report that was submitted to EPA in September 2000. The Annex was incorporated into the federal Regional Haze Rule under 40 CFR § 51.309(h) on June 5, 2003⁴.

The long-term strategy for stationary sources is implemented through the following documents:

- Sulfur Dioxide Milestones and Backstop Trading Program, Part E of this plan, describes the overall program and contains Utah's commitment to implement all parts of the program as outlined in the plan. The plan establishes the regional SO₂ milestones, emissions tracking requirements, and, if the Western Backstop SO₂ Trading Program (WEB Trading Program) is triggered, the plan also describes how Utah will determine allocations and manage the allowance tracking system that is needed to implement the program.
- R307-250, Western Backstop Sulfur Dioxide Trading Program, contains the requirements that will apply to major industrial sources of sulfur dioxide as a backstop regulatory program if the SO₂ milestones are exceeded. The rule may never be implemented if the goal to meet the regional SO₂ milestones through voluntary means is achieved. If the rule is implemented, it establishes the procedures and compliance requirements for sources in the trading program.
- R307-150 requires major industrial sources of SO₂ to submit an annual emissions inventory in the pre-trigger phase of the program to measure compliance with the regional SO₂ milestones. If the backstop program is triggered, then these requirements will eventually be replaced by more rigorous monitoring requirements in R307-250.

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68 FR 33764.

a. 2018 Milestone

The 2018 milestone of 510,000 tons, including a 30,000 ton set-aside for two copper smelters not currently operating (or 480,000 tons if the suspended smelters do not resume operation), represents a regional emission reduction of approximately 320,000 tons of SO₂ from the 1990 baseline emissions of 830,000 tons, and is well on the way to the GCVTC's goal of a 50-70% reduction by 2040. The Annex demonstrated that the 2018 regional sulfur dioxide milestone provides for greater reasonable progress than would be achieved by application of best available retrofit technology (BART), as required by 40 CFR 51.309(f)(1)(i). The WRAP estimated that BART reductions would total approximately 170,000 tons by 2018.

In modeling work conducted by the WRAP to verify the Annex analysis, it was determined that, in addition to the 16 Class I areas of the Colorado Plateau, the regional SO₂ milestones showed greater reasonable progress than would be achieved under BART for Utah's Class I areas and for any Class I areas affected by emissions from Utah. This demonstration can be found in Section 4.1.2 of the WRAP Technical Support Document. In accordance with 40 CFR 51.309(g)(ii), no further demonstration will be needed prior to 2018 for Utah's stationary sources identified in the Annex, in terms of satisfying BART for SO₂ under 40 CFR 51.308(e).

b. Interim Milestones

After considerable investigation, the WRAP Market Trading Forum determined that 1999 SO₂ emissions, including expected emissions of 38,000 tons from the two smelters not currently operating, were about 690,000 tons. Interim milestones are intended to meet the GCVTC's recommendation for steady and continuing reductions, while giving the regulated community operating flexibility in the early years and time to integrate planning for regional haze reductions with other factors such as electricity deregulation. Milestones step down every fifth year. The proposed interim milestones with the suspended smelters in and out respectively are 720,000/682,000 tons in 2003; 715,000/677,000 tons in 2008; and 655,000/625,000 tons in 2013.

c. Triggering the Trading Program

States and tribes will collect an annual SO₂ inventory. Compliance with the milestones is determined by an annual comparison of the rolling 3-year average of total regional emissions with the rolling 3-year average of the milestones. For 2018, total emissions will be compared with the 2018 milestone. If a milestone is exceeded, the trading program is activated and emission allocations are made one year later with sources having five years from the year of exceedance to comply with their allocation. Sources may comply by retrofitting to bring emissions below their allocation, by buying credits to emit from other sources, by retiring the source, or by other means.

d. Certainty that 2018 Milestone Will Be Met on Time

With such a large proportion of the reductions scheduled to occur in the last five years of the program, it is important to ensure that all the reductions occur on time. Therefore, Part E of this Plan includes a mechanism for the states and tribes to activate the trading program in 2013 if available evidence indicates the 2018 milestone will not be reached. In order to be in compliance with the 2018 milestone, the 2018 emissions must be less than the 2018 milestone. Sources that have not controlled their emissions in accordance with their allocations will be subject to financial penalties and a 2:1 offset of future emissions allocations for each ton of excess emissions.

e. Trading Program Features

Details of the backstop trading program such as applicability, monitoring and reporting, trading procedures, compliance requirements and penalties, are defined in R307-250. Sources that reduce their emissions below their allocation will be able to sell excess allowances to other sources, within certain programmatic restrictions.

f. Allocations

If the program is triggered, 20,000 tons of SO₂ allocations will be set aside for tribal interests, acknowledging that tribal lands are largely undeveloped and that tribes would not benefit from a plan based only on past emissions. There will be a new source set-aside to accommodate growth within the region. Existing sources will receive a "floor" allocation based on a "clean unit" emission rate. Certain renewable energy sources also will be eligible to receive an allocation. The remainder of the allowances, which will decline over the years, will be allocated to existing sources. If the program is triggered, sources may buy and sell allowances to come into compliance.

g. State and Tribal Opt-In or Opt-Out

In the event that states or tribes with existing sources in the region choose to develop regional haze plans under 40 CFR §51.308, proportional adjustments will be made to the milestones and the program components will be altered accordingly.

4. Geographic Enhancement Program

The requirements for geographic enhancement are discussed on page 35757 in the Preamble to the regional haze rule. These requirements are related to 40 CFR 51.309(f)(1) that describes requirements for the Annex. The Annex allows states to submit a SIP, or tribes a TIP, which adopts an alternative measure to regional haze BART. Geographic enhancement is a voluntary approach that can be included in the Annex for addressing reasonably attributable visibility impairment (RAVI) for stationary sources, under the provisions of 40 CFR 51.302(c). RAVI is different from regional haze in that it addresses "hot spots" or situations where visibility impairment in a Class I area is reasonably attributable to a single source or small group of sources in relatively close proximity to the Class I area. A Model Memorandum of Agreement (MOA) between federal land managers and states to address the RAVI certification process is included in the Utah TSD Supplement for this Plan. The model MOA was drafted to provide sources greater certainty regarding their potential risk of being certified as a RAVI source by a Federal Land Manager. Sources can incorporate this information into their business planning process, and use the efficiencies and reduced costs of the market to address potential RAVI issues.

Procedure for addressing Reasonably Attributable Visibility Impairment under the Regional Haze Rule. If the National Park Service certifies impairment, the State of Utah will fulfill its obligations to determine attribution and if necessary determine BART for the applicable source or group of sources in accordance with Utah's SIP for visibility protection submitted to EPA on April 26, 1985, and approved on May 30, 1986. Additional information regarding possible technical approaches for determining attribution is contained in the WESTAR report, *Recommendations for Making Attribution Determinations in the Context of Reasonably Attributable BART*.

5. Report on Assessment of NO_x/PM Strategies

Assessment of Need for NO_x and PM milestones. Pursuant to 40 CFR 51.309(d)(4)(v), the State of Utah has evaluated the need for NO_x and PM emission control strategies, the degree of visibility improvement expected, and whether such milestones are needed to avoid any net increase in these pollutants. This evaluation was based on an assessment of NO_x and PM stationary source emissions made by the WRAP Market Trading Forum for all WRAP states, including the transport region states.⁵

Several conclusions were reached based on current analyses.

- For the vast majority of Class I areas throughout the WRAP region, stationary source NO_x and PM emissions are not a major contributor to visibility impairment on the average 20% best and 20% worst days. However, on some of the worst days nitrates and PM are the main components of visibility impairment.
- Stationary source NO_x emissions are projected to increase by 4% between 1996 and 2018. Stationary source NO_x emissions probably cause 2% - 5% of the visibility impairment on the Colorado Plateau.
- Stationary source PM emissions are projected to increase by 29% between 1996 and 2018. Stationary source PM emissions probably cause less than 2% of the regional visibility impairment.
- The current regional modeling does a poor job of predicting nitrate concentrations in the winter when NO_x has the greatest impact on visibility impairment. The modeling also does a poor job of predicting the impact of localized fugitive dust impact. The WRAP is currently making significant improvements to the model and to the emission inventories to address these issues.
- There is a wide range of emission reduction techniques available to control NO_x and PM emissions, and many of the technologies are cost-effective. The current emission inventory does not contain enough information to determine what technologies are currently in place in the West and the cost of additional controls.
- RAVI remedies are available in cases where particular stationary sources may impact particular Class I areas.

The complete report is provided in the Utah TSD Supplement. The State of Utah is not able to determine the need for NO_x and PM emission reduction strategies or the need for NO_x or PM milestones at this time. The State of Utah will continue to work with the WRAP to improve the emission inventories and regional modeling to support future policy decisions regarding stationary source NO_x and PM emissions.

The State of Utah will submit an implementation plan revision by December 31, 2008, to incorporate any necessary long-term strategies and BART requirements for stationary source PM and NO_x (including enforceable limitations, compliance schedules, and other measures) as required under 40 CFR 51.309(d)(4)(v).

⁵WRAP. *Stationary Source NO_x and PM Emissions in the WRAP Region: An Initial Assessment of Emissions, Controls, and Air Quality Impacts*. Denver, CO. Presented to the WRAP Board October 15, 2003.

B. SULFUR DIOXIDE MILESTONES AND BACKSTOP TRADING PROGRAM

1. Milestones and Determination of Program Trigger

a. Regional Sulfur Dioxide Milestones

(1) *Base Milestone Values.* The regional sulfur dioxide (SO₂) base milestones for the years 2003 through 2018 are provided in Table 3. The base milestones will be adjusted annually as described in paragraphs E.1.a(2) and (3) of this plan.

TABLE 3. Base Sulfur Dioxide Emissions Milestones (excludes Smelter Set-aside)

Column 1	Column 2	Column 3
For the year	the base regional sulfur dioxide milestone is	and the annual SO ₂ emissions for these years will determine whether emissions are greater than or less than the milestone
2003	682,000 tons SO ₂	2003
2004	682,000 tons SO ₂	Average of 2003 and 2004
2005	682,000 tons SO ₂	Average of 2003, 2004 and 2005
2006	682,000 tons SO ₂	Average of 2004, 2005 and 2006
2007	682,000 tons SO ₂	Average of 2005, 2006 and 2007
2008	680,333 tons SO ₂	Average of 2006, 2007 and 2008
2009	678,667 tons SO ₂	Average of 2007, 2008 and 2009
2010	677,000 tons SO ₂	Average of 2008, 2009 and 2010
2011	677,000 tons SO ₂	Average of 2009, 2010 and 2011
2012	677,000 tons SO ₂	Average of 2010, 2011 and 2012
2013	659,667 tons SO ₂	Average of 2011, 2012 and 2013
2014	642,333 tons SO ₂	Average of 2012, 2013 and 2014
2015	625,000 tons SO ₂	Average of 2013, 2014 and 2015
2016	625,000 tons SO ₂	Average of 2014, 2015 and 2016
2017	625,000 tons SO ₂	Average of 2015, 2016 and 2017
2018	480,000 tons SO ₂	Year 2018 only
2019 forward, until replaced by an approved SIP	480,000 tons SO ₂	Annual; no multiyear averaging

(2) *Adjustments for participation by eligible States and Tribes.* The amount provided in Table 4 below will be subtracted from the base milestone in Table 3 for each state and tribe that does not have an Implementation Plan approved by the EPA Administrator as meeting the requirements of 40 CFR 51.309 as of December 31 of the year following the milestone year. The first adjustment to the 2003 milestone will be made no later than March 31, 2005, and will be based on all states and tribes that do not have a federally-approved Implementation Plan as of December 31, 2004.

TABLE 4. (Years 2003-2018) Amounts of SO₂ Tons To Be Subtracted from the Base Milestones for States and Tribes That Do Not Have an Approved Implementation Plan under 40 CFR 51.309*

State or Tribe	2003	2004	2005	2006	2007	2008	2009	2010
1. Arizona	117,372	117,372	117,372	117,372	117,372	117,941	118,511	119,080
2. California	37,343	37,343	37,343	37,343	37,343	36,363	35,382	34,402
3. Colorado	98,897	98,897	98,897	98,897	98,897	98,443	97,991	97,537
4. Idaho	18,016	18,016	18,016	18,016	18,016	17,482	16,948	16,414
5. Nevada	20,187	20,187	20,187	20,187	20,187	20,282	20,379	20,474
6. New Mexico	84,624	84,624	84,624	84,624	84,624	84,143	83,663	83,182
7. Oregon	26,268	26,268	26,268	26,268	26,268	26,284	26,300	26,316
8. Utah	42,782	42,782	42,782	42,782	42,782	42,795	42,806	42,819
9. Wyoming	155,858	155,858	155,858	155,858	155,858	155,851	155,843	155,836
10. Navajo Nation	53,147	53,147	53,147	53,147	53,147	53,240	53,334	53,427
11. Shoshone-Bannock Tribe of the Fort Hall Reservation	4,994	4,994	4,994	4,994	4,994	4,994	4,994	4,994
12. Ute Indian Tribe of the Uintah and Ouray Reservation	1,135	1,135	1,135	1,135	1,135	1,135	1,135	1,135
13. Wind River Reservation	1,384	1,384	1,384	1,384	1,384	1,384	1,384	1,384
State or Tribe	2011	2012	2013	2014	2015	2016	2017	2018
1. Arizona	119,080	119,080	116,053	113,025	109,998	109,998	109,998	82,302
2. California	34,402	34,402	33,265	32,128	30,991	30,991	30,991	27,491
3. Colorado	97,537	97,537	94,456	91,375	88,294	88,294	88,294	57,675
4. Idaho	16,414	16,414	15,805	15,197	14,588	14,588	14,588	13,227
5. Nevada	20,474	20,474	20,466	20,457	20,449	20,449	20,449	20,232
6. New Mexico	83,182	83,182	81,682	80,182	78,682	78,682	78,682	70,000
7. Oregon	26,316	26,316	24,796	23,277	21,757	21,757	21,757	8,281
8. Utah	42,819	42,819	41,692	40,563	39,436	39,436	39,436	30,746
9. Wyoming	155,836	155,836	151,232	146,629	142,025	142,025	142,025	97,758
10. Navajo Nation	53,427	53,427	52,707	51,986	51,266	51,266	51,266	44,772
11. Shoshone-Bannock Tribe of the Fort Hall Reservation	4,994	4,994	4,994	4,994	4,994	4,994	4,994	4,994
12. Ute Indian Tribe of the Uintah and Ouray Reservation	1,135	1,135	1,135	1,135	1,135	1,135	1,135	1,135
13. Wind River Reservation	1,384	1,384	1,384	1,384	1,384	1,384	1,384	1,384

*These numbers differ from Annex opt-in/-out tables in that the smelter set-aside is excluded and the new source set-aside is included.

(3) *Adjustment for Future Operation of Copper Smelters in Arizona and New Mexico.* If either the BHP San Manuel smelter in Arizona or the Phelps Dodge Hidalgo smelter in New Mexico resumes operation, the milestones will be increased as described below. The adjustment will occur only if the respective state has a State Implementation Plan approved by the EPA Administrator under 40 CFR 51.309. Once the adjustments have been made, the milestones will not be changed due to future suspensions or changes in plant operations, except as provided below. If Arizona or New Mexico elect not to submit a SIP under 40 CFR 51.309, the emissions for the smelters in the state without a SIP under Section 309 will be subtracted from the smelter set-aside.

(a) If one or both smelters resume operations under their existing permits, the milestone will be adjusted upward for each smelter respectively by the following amounts:

1. Phelps Dodge Corporation, Hidalgo Smelter: 22,000 tons SO₂
2. BHP, San Manuel Smelter: 16,000 tons SO₂
3. For the 2013 through 2018 milestones, the maximum increase will be 30,000 tons SO₂.

(b) If Arizona or New Mexico determines that either smelter will resume operation by operating only a portion of the plant, the milestone adjustment in (a) will be reduced by a percentage to reflect current conditions. If the smelter resumes normal operations at a later date, the full adjustment described in (a) will be applied.

(c) If one or both smelters resume operations after going through new source review, the milestone adjustment will be based on the new permitted level for the source, but in no instance may the adjustment to the milestones exceed 22,000 tons SO₂ per year for the Hidalgo Smelter or 16,000 tons SO₂ per year for the San Manuel Smelter.

(d) If one or both smelters do not resume operation, the executive secretary will determine, based on the calculation procedures in XX.E.1.c(4) of this Plan, the amount of source-specific set aside that will be added to the milestone to account for capacity expansion at the remaining smelters. This set-aside will only be available for use if sulfur input and emissions from an individual copper smelter is above the baseline level listed in Table 5 in any particular year as a result of increased capacity. The increase to the milestone will be based on a smelter's proportional increase above its baseline sulfur input. The set-aside will be recalculated every year to reflect actual operations of the remaining copper smelters. The set-aside may not be traded under the backstop trading program.

TABLE 5. Preliminary Smelter-Specific Set Aside

Company/Smelter	Baseline Sulfur Input	Baseline Allocation	Smelter-specific Set-aside
BHP San Manuel	417,200 tons	16,000 tons SO ₂	1,500 tons SO ₂
Asarco Hayden	235,000 tons	23,000 tons SO ₂	3,000 tons SO ₂
Phelps Dodge Chino	212,800 tons	16,000 tons SO ₂	3,000 tons SO ₂
Phelps Dodge Hidalgo	256,800 tons	22,000 tons SO ₂	4,000 tons SO ₂
Phelps Dodge Miami	208,700 tons	8,000 tons SO ₂	2,000 tons SO ₂
Kennecott Utah Copper Corporation, Smelter and Refinery	340,269 tons	1,000 tons SO ₂	100 tons SO ₂
TOTAL	1,670,769 tons	86,000 tons SO₂	13,600 tons SO₂

(4) Other Milestone Adjustments.

(a) All other milestone adjustments will require a SIP revision. Paragraph E.1.c(3) of this plan outlines adjustments to be made to the emissions inventory to ensure a consistent comparison to the milestones. These adjustments will be incorporated

into the milestones every five years as part of the periodic implementation plan revisions required by 40 CFR 51.309(d)(10). Adjustments to the milestones will be tracked in the annual emissions report described in paragraph E.1.c(4) of this Plan.

(b) Within ninety days of adoption by the Utah Air Quality Board of the periodic Implementation Plan revision incorporating adjustments based on paragraph E.1.c(3) or (4) of this Plan, the State of Utah will provide notice to sources whose records were used to calculate the adjustments, including the date of the SIP adoption and a statement that the source needs to retain the applicable records for at least five years from the date that the SIP was adopted, or ten years from the date of establishing the record, whichever is longer.

b. Regional Program Administration

(1) *Pre-trigger tracking of regional SO₂ emissions.* The executive secretary will work cooperatively with the states and tribes that are participating in the SO₂ Milestones and Backstop Trading Program to ensure that an emission tracking system for the regional SO₂ inventory is developed and maintained. The executive secretary is responsible for all regional program administration functions as described in this plan. The executive secretary will perform these functions using the WRAP as the executive secretary's agent. The Western Regional Air Partnership (WRAP) compiled the SO₂ emission inventories that were used during the development of the Annex, and the WRAP continues to refine and improve the overall tracking system for regional haze. The WRAP will maintain the pre-trigger emissions tracking functions described in this plan for the foreseeable future. If the WRAP is no longer able to fulfill this function, then the executive secretary will ensure that other arrangements are made, either through a different regional organization or through a contractor, to maintain the SO₂ tracking system that is described in this plan. The WRAP has no authority to make regulatory determinations. The WRAP has limited authority under this plan to perform tracking and accounting functions, prepare reports, and perform other administrative functions as directed by the executive secretary. The executive secretary will work expeditiously to correct any problems if the WRAP fails to perform any of the functions described in this plan in a timely manner.

(2) *Designation of the Tracking System Administrator.* If the backstop trading program is triggered due to an exceedance of the SO₂ milestones as outlined in Part E.1.c of this plan, the executive secretary will work cooperatively with the other participating states and tribes to designate one Tracking System Administrator (TSA). The TSA will be designated as expeditiously as possible, but no later than six months after the program trigger date. In addition, before the TSA is designated, the executive secretary will enter into a binding contract with the TSA that will require the TSA to perform all TSA functions described in this plan. The State of Utah has sufficient authority under State contract law to ensure that the functions in this plan are carried out by the TSA.

(3) *Information Provided by other States and Tribes.* The executive secretary will accept the emission inventory and permitting information provided by the other participating states and tribes in order to determine the milestone value and program trigger if such other states and tribes have provided proper documentation and followed the public notification process in their federally approved implementation plans.

c. Determination of Program Trigger

(1) The executive secretary will submit an annual emissions report to the WRAP and all participating states and tribes by September 30 of each year. The report will document actual sulfur dioxide emissions during the previous calendar year for all sources subject to the Sulfur Dioxide Milestone Inventory requirements of R307-150. The first report for calendar year 2003 will be submitted by September 30, 2004. If the WEB Trading Program is triggered as outlined in paragraph E.1.c(10) of this plan, annual reports will be prepared during the interim period for informational purposes until the trading program is fully implemented. The executive secretary will prepare the supporting documentation that is included with the annual emissions report as noted in (2) and (3) below.

(2) The annual emissions report for Utah will include a source emissions change report that contains the following information:

- (a) identification of any new sources that were not contained in the previous calendar year's emissions report, and an explanation of why the source is now included in the program;
- (b) identification of any sources that were included in the previous year's report and are no longer included in the program, and an explanation of why this change has occurred; and
- (c) an explanation for increases or decreases of emissions at any applicable source of more than twenty percent from the previous year.

(3) The annual emissions report for Utah will include the proposed emissions adjustment as described in (a) through (c) to ensure a consistent comparison to the milestones.

(a) Changes in flow rate measurement methods. Actual emission inventories for utilities that use EPA's Reference Method 2F, 2G, or 2H to measure stack flow rate will be adjusted to be comparable with the flow rate assumptions that were used in 1999, the base year inventory for the Annex. The adjustment may be calculated using any of the following three methods, and emissions for the year 2018 will not be adjusted.

(i) Directly determine the difference in flow rate through a side-by-side comparison of data collected with the new and old flow reference methods during a relative accuracy test audit (RATA) test.

(ii) Compare the annual average heat rate using Acid Rain heat input data (MMBtu) and total generation (MWHrs) as reported to the federal Energy Information Administration. Under this approach, the flow adjustment factor will be calculated using the following ratio:

Heat input/MW for first full year of data using new flow rate method
Heat input/MW for last full year of data using old flow rate method.

(iii) Compare the standard CFM per MW before and after the new flow reference method based on CEMs data submitted in the Acid Rain Program, as follows:

SCF/Unit of Generation for first full year of data using new flow rate method

SCF/Unit of Generation for last full year of data using old flow rate method.

(b) Changes in emission monitoring or calculation methods. Actual emission inventories for sources that change the method of monitoring or calculating their emissions will be adjusted to be comparable to the emission monitoring or calculation method that was used in the base year inventory for the Annex (1999 for utilities and 1998 for all other sources).

(4) *The annual sulfur dioxide milestone and emissions report* for Utah will document any adjustments that should be made to the milestone for the previous year as follows.

(a) The executive secretary will document the submittal date of this Implementation Plan to implement the regional Sulfur Dioxide Milestones and Backstop Trading Program, and the approval date by the EPA Administrator, if applicable.

(b) Kennecott Utah Copper (KUC) may submit sulfur input data and SO₂ emissions data to the executive secretary to demonstrate that KUC qualifies for the smelter specific set-aside described in Part E.1.a(3)(d) of this Plan. If actual emissions and sulfur input are greater than the baseline level in Table 5, and either the BHP San Manuel smelter in Arizona or the Phelps Dodge smelter in New Mexico have not resumed operation, the executive secretary will determine the milestone adjustment for KUC by determining the increase in the milestone based on the proportional increase in sulfur input over baseline levels. For each smelter, the adjustment will not exceed the smelter-specific set-aside listed in Table 5.

(c) Changes due to enforcement actions.

(i) *Adjustments due to settlements arising from enforcement actions.*

Adjustments to the milestones will be made, as specified in subsection (iii) below, if:

(A) an agreement to settle an action, arising from allegations of a failure of an owner or operator of an emissions unit at a source in the program to comply with applicable regulations which were in effect during the base year, is reached between the parties to the action;

(B) the alleged failure to comply with applicable regulations affects the assumptions that were used in calculating the source's base year and forecasted sulfur dioxide emissions; and

(C) the settlement includes or recommends an adjustment to the milestones.

(ii) *Adjustments due to administrative or judicial orders.* Adjustments to the milestones will be made as directed by any final administrative or judicial order, as specified in (iii) below. Where the final administrative or judicial order does not include a reforecast of the source's baseline, the executive secretary will evaluate whether a reforecast of the source's baseline emissions is appropriate.

(iii) *Adjustments method and effective dates.* The milestone will be decreased by an appropriate amount based on a reforecast of the source's decreased sulfur

dioxide emissions. The adjustments will not be made to the milestone until after the source has reduced its sulfur dioxide emissions as required in the settlement agreement, or administrative or judicial order.

(iv) *Documentation of adjustments for enforcement actions.* The report will include the following documentation of any adjustment due to an enforcement action or a settlement agreement:

(A) identification of each source in Utah that has reduced sulfur dioxide emissions pursuant to a settlement agreement or an administrative or judicial order;

(B) for each source identified, a statement indicating whether the milestones were adjusted in response to the enforcement action;

(C) discussion of the rationale for the executive secretary's decision to adjust or not to adjust the milestones; and

(D) if SO₂ emissions reductions over and above those reductions needed for compliance with the applicable regulations were part of an agreement to settle an action, a statement indicating whether such reductions resulted in any adjustment to the milestones or allowance allocations, and a discussion of the rationale for the executive secretary's decision on any such adjustment.

(v) The State of Utah will include all accumulated milestone adjustments due to enforcement actions or settlement agreements in the periodic SIP revisions required under 40 CFR 51.309(d)(10).

(5) *Compilation of Reports.*

(a) The WRAP will compile the annual emissions reports submitted by all participating states and tribes into a draft regional emission report for sulfur dioxide. The WRAP will follow additional quality assurance procedures developed by member states and tribes to identify possible errors in the emissions data, including screening for missing or added sources, name changes, and significant changes in reported emissions. Any questions or anomalies regarding Utah's report will be resolved by the executive secretary prior to the submission of the draft regional emission report.

(b) By December 31 of each year, the WRAP will submit the draft regional emission and milestone report to the executive secretary and all participating states and tribes and will post the report on the WRAP's web page. The report will include the following information for all states and tribes that have an implementation plan that has been approved by the EPA Administrator under 40 CFR 51.309(h):

(i) actual regional sulfur dioxide emissions in tons per year;

(ii) adjustments to account for:

(A) changes in flow rate measurement methods, and

(B) changes in emission monitoring or calculation methods;

(iii) average adjusted emissions for the last three years for comparison to the regional milestone, if adjustments were made;

(iv) regional milestone adjustments to account for participation by eligible states and tribes and the future operation of smelters in Arizona and New Mexico; and

(v) regional milestone adjustments due to enforcement actions or settlement agreements.

(c) A separate report that includes additional states and tribes that have submitted implementation plans that are still under review by the Environmental Protection Agency will also be prepared for information purposes.

(6) The executive secretary will evaluate the draft regional emissions report and will propose a draft determination that the sulfur dioxide milestone has either been met in the region, or has been exceeded. In the event that the TSA has not submitted a draft regional emissions and milestone report to the executive secretary by the December 31 deadline for any year, the executive secretary will prepare the report for that year based upon the annual emissions reports submitted by all participating states and tribes to the WRAP for that year. The executive secretary will modify the data in these annual emissions reports, or use data where such report(s) have not been submitted, based upon direction received from the Environmental Protection Agency.

(7) The executive secretary will advertise availability of the draft regional emissions report and will notify the public of the draft determination by publishing a notice in newspapers of general circulation throughout Utah. A 30-day public comment period will be established, and a public hearing will be held during the public comment period. The executive secretary will also submit the draft determination to EPA for review and comment concurrently.

(8) The executive secretary will consider any comments received during the comment period, and will submit a copy of all comments to the WRAP and to all participating states and tribes along with a response that addresses the comments.

(9) The WRAP will compile the comments and responses from all participating states and tribes and prepare a draft final regional emissions report. The report will be submitted to the states and tribes that are participating in the program and, if necessary, the report will propose a common program trigger date.

(10) The executive secretary will review and approve the final regional emissions report. The executive secretary will then submit this report to the Environmental Protection Agency along with a final determination that the milestone either has been met in the region, or that the milestone has been exceeded and the WEB Trading Program has been triggered in Utah. This determination will be submitted to the Environmental Protection Agency by the end of March, fifteen months following the milestone year. The first determination will be submitted by March 31, 2005, for the 2003 milestone. If the milestone has been exceeded, the common trigger date proposed in the regional report will become the program trigger date for purposes of implementing the WEB Trading Program. In the event that the program trigger date must be established by the executive secretary in the absence of a regional emissions and milestone report prepared by the WRAP, the program trigger date will be March 31 of the applicable year.

(11) The executive secretary will publish a notice of the final determination in newspapers of general circulation throughout the state of Utah. This notice will include the milestone and the final annual regional SO₂ emissions for that year. If the milestone has been exceeded, the notice will specify the program trigger date and the first year that WEB sources must be in compliance with the WEB Trading Program provisions as outlined in R307-250-12.

d. Year 2013 Assessment

(1) Initial Assessment in 2013 Periodic SIP Review.

(a) The executive secretary will work cooperatively through the WRAP with other participating states and tribes to develop a projected emission inventory for SO₂ through the year 2018, using the 2010 regional inventory as a baseline. This projected inventory will be included in the 2010 annual emission and milestone report that will be completed in March 2012 as outlined in paragraph E.1.c of this plan.

(b) The executive secretary will evaluate the projected inventory, and based upon this information will make an assessment of the likelihood of meeting the regional milestone for the year 2018. The executive secretary will include this assessment as part of Utah's progress report that must be submitted by December 31, 2013, as required by 40 CFR 51.309(d)(10).

(2) Regional Emissions Report for 2012.

(a) The executive secretary will prepare an SO₂ emission report for the year 2012 by September 30, 2013, as described in paragraph E.1.c(1) of this plan. The executive secretary will include a list of all known or anticipated sources in Utah that are anticipated to affect total SO₂ emissions in 2018. This may include permitted sources, projects that are still in the planning stage, or projections from the affected sources of anticipated emissions in 2018. The status of these projects will be described to provide a better understanding of the degree of certainty that individual projects will be completed by 2018.

(b) The WRAP will compile the information from all participating states and tribes, prepare draft SO₂ inventory projections for the year 2018, and estimate the effect of known future sources on SO₂ emissions. Projected 2018 emissions will be compared to the 2018 milestone. This information will be included in the draft regional emissions report for 2012 that will be submitted to the executive secretary by December 31, 2013, as outlined in paragraph E.1.c(5) of this Plan. The draft report will be published on the WRAP web site for a period of public review and comment for not less than 30 days.

(3) Consensus Decision. The executive secretary commits to meet with the participating states and tribes in March 2014 to discuss any comments received on the 2018 emission projections in the draft report. The participating states and tribes will decide, through a consensus process, whether it is necessary to trigger the WEB trading program early in order to meet the SO₂ emission reduction goals in 2018.

(4) Early Trigger: Timing. If the participating states and tribes unanimously decide in the March 2014 meeting that an early trigger of the backstop trading program is necessary, the executive secretary will trigger the WEB Trading Program and the timing of the program

elements will be adjusted as follows to ensure that the WEB Trading Program is in place in 2018.

(a) The date of the consensus decision by the participating states and tribes to voluntarily trigger the WEB trading program will become the program trigger date.

(b) Allowances for 2018 will be distributed to WEB sources by January 1, 2015.

(c) The first control period will be the year 2018. WEB sources will need to demonstrate at the end of the first control period that they have enough allowances to cover their 2018 SO₂ emissions.

(5) *Public Notification.* The executive secretary will publish notice of the decision in newspapers of general circulation in Utah. If applicable, the notice will include a statement that the WEB Trading Program is in effect and will specify the program trigger date.

e. Special Penalty Provisions for the 2018 Milestone

If the WEB Trading Program is triggered as outlined in paragraph E.1.c of this Plan, and the first control period will not occur until after the year 2018, a special penalty will be assessed if the 2018 milestone is exceeded.

(1) The executive secretary will allocate allowances to all WEB sources using the methods established in the 2013 SIP revision described in Part E.4 of this plan. WEB sources will have the option to buy and sell allowances during a two-month allowance transfer period as provided in R307-250-13(1)(c).

(2) At the end of this two-month allowance transfer period, compliance with the allowance limitation will be determined as provided in R307-250-12. Penalties will be assessed for SO₂ emissions that are greater than the allowance limitation for each WEB source as provided in R307-250-12(3). However, notwithstanding R307-250-12(1) through (3), SO₂ emissions in the year 2018 for each WEB source will be determined in accordance with the Sulfur Dioxide Milestone Inventory requirements of R307-150.

(3) The 2018 special penalty provision will continue to be applied each year after 2018 until the 2018 milestones have been achieved.

2. Pre-Trigger Emissions Tracking Requirements

a. SO₂ Emission Inventory

40 CFR 51.309 sets forth emissions inventory requirements for tracking compliance with the SO₂ milestones. R307-150 has been revised to supplement Utah's inventory requirements to satisfy the needs of this program.

(1) *Applicability.* The sulfur dioxide milestone inventory requirements of R307-150 require all stationary sources with actual emissions of 100 tons per year or more of SO₂ in the year 2000, or in any subsequent year, to submit an annual inventory of SO₂ emissions, beginning with the 2003 emission inventory. A source that meets these criteria and then emits less than 100 tons per year in a later year must continue to submit an SO₂ inventory for tracking compliance with the regional SO₂ milestones until 2018 or until the WEB Trading Program has been fully implemented and emission tracking is occurring under R307-250-9, whichever is earlier.

(2) R307-150 contains enforceable requirements for WEB sources.

(a) Each source will submit an annual inventory of SO₂ emissions.

(b) Each source will use appropriate emission factors and estimating techniques and document the emissions monitoring or estimation methodology used.

(c) Each source will include emissions from start up, shut down, and upset conditions in the annual total inventory.

(d) Each source subject to the federal acid rain program will use methods from 40 CFR Part 75 to report emissions from all sources.

(e) Each source will include the rate and period of emissions, the specific installation that is the source of the air pollution, composition of air contaminant, type and efficiency of the air pollution control equipment and other information necessary to quantify operation and emissions, and to evaluate pollution control.

(f) Each source will retain records for a minimum of 10 years from the date of their creation, or if the record was the basis for an adjustment to a milestone, 5 years from the date of an implementation plan revision, whichever is longer.

(3) The executive secretary will quality-assure the submitted inventory data as outlined in the Inventory Preparation Plan. The executive secretary will screen the inventories to identify changes in emission measurement techniques that would require an inventory and milestone adjustment as outlined in paragraph E.1.c(3) of this Plan.

(4) The executive secretary will retain historical emission inventory records for non-utilities from 1996 and 1998 that may affect milestone calculations under paragraph E.1.c(3) and allocation decisions under paragraph E.3.a of this plan until the year 2018 to ensure that changes in emissions monitoring techniques can be tracked.

b. Development of Emission Tracking System

The executive secretary will work cooperatively with the WRAP to ensure that an emission tracking system for the regional SO₂ inventory is developed and maintained.

c. Periodic Audit of Pre-Trigger Emission Tracking Database

(1) During the pre-trigger phase when the executive secretary is tracking compliance with the regional SO₂ milestones, the executive secretary will work cooperatively with the participating states and tribes to ensure that an independent audit of the tracking database is conducted to make sure that the WRAP is accurately compiling the regional emissions report.

(a) The first audit will occur during the year 2006 and will review data collected during the first two years of the program.

(b) Subsequent audits will occur in 2011, which will cover emissions years 2005-2009, and 2016, which will cover emissions years 2010-2014.

(2) The primary focus of the audit will be the process that is used to compile the regional inventory from the data provided by each state and tribe, and the tracking of accumulated changes during the period between SIP revisions. The audit will also review the accuracy and integrity of the regional reports that are used to determine compliance with the milestones. The audit will not be a full review of Utah's process for compiling and reporting SO₂ emissions, but will include a broad review of Utah's inventory management and quality assurance systems, including the presence and exercise of systems to assure data quality and integrity.

(3) The audit will discuss the uncertainty of emissions calculations, and whether this uncertainty is likely to affect the annual determination of whether the milestone is exceeded. It will identify any recommended changes to emissions monitoring or calculation methods or data quality assurance systems. It will also review and recommend any changes to improve the administrative process of collecting the annual emissions data at the state and tribal level, compiling a regional emission inventory, and making the annual determination of whether the WEB Trading Program has been triggered.

(4) Changes to the SO₂ Milestones and Backstop Trading Program, including any changes to the milestones due to the results of these periodic audits, will be submitted to EPA as a SIP revision as part of the five-year SIP review required by 40 CFR 51.309(d)(10).

(5) The executive secretary will advertise the availability of the draft audit report by publishing a notice in newspapers of general circulation in Utah. A 30-day public comment period will be established, and a hearing will be held during the public comment period. The executive secretary will respond to comments and provide notice of the availability of the final audit report. The executive secretary will submit the final audit report to the EPA regional office.

3. WEB Trading Program Requirements

a. Initial Allocation of SO₂ Allowances

(1) Draft Allocation Report. Within six months of the program trigger date, as outlined in paragraph E.1.c(11) of this plan, the executive secretary will submit a draft allocation report to all participating states and tribes and to the TSA. This report will contain the following information:

(a) A list of all WEB sources in Utah as defined in R307-250 that groups the sources into two categories:

(i) Category 1: WEB sources that commenced operation prior to January 1, 2003. These sources will receive a floor allocation and will be eligible for the reducible portion of the allocation.

(ii) Category 2: WEB sources that commenced operation on January 1, 2003 or a later date. These sources will receive a floor allocation, but will not be eligible for the reducible allocation. The floor allocation for Category 2 sources will be deducted from the new source set-aside.

WEB sources that have received a retired source exemption under R307-250-4(4) will be included in the allocation process in the same manner as WEB sources that are currently operating. However, sources that were permanently shut down prior to the program trigger date

are not considered WEB sources under R307-250-4(1) and would therefore not be included in the allocation process.

(b) The floor allocation for all WEB sources in Utah.

(i) For non-utility category 1 WEB sources, the floor allocation will be as established in the E.H. Pechan Report, “Market Trading Forum Non-Utility Sector Allocation Final Report from the Allocations Working Group” (November 2002). If any additional category 1 sources are identified, the executive secretary will calculate a floor allocation using the methodology outlined in the E.H. Pechan Report.

(ii) For utility category 1 WEB sources, the floor will be calculated by first assigning a “clean unit” emission rate to each unit. The clean unit emission rate will then be multiplied by an annual heat input (MMBtu) that represents a realistic upper bound for the unit.

(Note: The floor level approach described above is designed to address equity issues regarding the allocation process for utilities. The State of Utah is participating in ongoing discussions with the other participating states, [tribes](#) and regional stakeholders to ensure that all equity issues have been addressed.)

Principles

- Each unit will have enough allowances to operate as a clean source and at an operating rate (capacity factor) that is a realistic upper bound for the unit.
- There will not be significant winners and losers in this process.
- The focus is on a fair approach that is applied equally to all sources rather than on state and tribal budgets.
- The allocation process will use data that reflect current conditions, including current monitoring methodologies.

Equity Issues

- Sources that are currently burning very low sulfur coal may see changes in their supply in the future. Historic actual emissions may not reflect future operations.
- Sources that are currently operating at a low utilization may not reach full capacity in the future. Assumptions about growth that are realistic on the regional level may provide a windfall to some sources, and not provide adequate allowances for other sources.
- There are some utility units in the region that are not BART-eligible and are operating at a low level of control for SO₂. The relative responsibility of BART-eligible vs. non-BART-eligible is a consideration in the process.

- Sources that are operating at a high level of control are already bearing the cost of control and this affects their ability to compete in the market.
- Sources that have no SO₂ controls are facing a large expense that could affect their ability to continue to operate.
- Emission rate disparities exist throughout the region.

(iii) For Category 2 WEB sources the floor allocation will be the lower of the permitted SO₂ annual emissions for the WEB source, or SO₂ annual emissions calculated based on a level of control equivalent to BACT and assuming 100% utilization of the WEB source.

(c) A list of certified early reductions, expressed as tons of SO₂. Early reductions will be calculated and certified as follows:

(i) Any WEB source that installs control technology and accepts new permit emissions limits that are, for a non-utility source, below its floor as established in this section, or, for a utility source, below BACT, may apply for an early reduction credit as outlined in R307-250-7(5). The credit will be available for reductions that occur between 2003 and the program trigger year. The application must show that the floor was calculated in a manner that is consistent with the monitoring requirements of R307-250-9(1)(a) and the new permit must contain monitoring requirements that are consistent with R307-250-9(1)(a). Emission units that are monitored using the less stringent monitoring requirements of R307-250-9(1)(b) are not eligible for early reduction credits. The credits accumulate from the time the new controls come on line until the program trigger date and will be allocated to the WEB source over a 10 year period. The use of early reduction credits in any control period is limited to no more than five percent, systemwide, of the existing available allowances, as provided in paragraph E.3.a(2)(e) of this plan.

(ii) The executive secretary will review the application and will certify early reductions for each full year between 2003 and the program trigger year that meet the requirements of R307-250-7(5) and this plan.

(iii) A source's certified early reductions for all years will be added together to obtain the total certified early reductions for that source.

(d) A list of all renewable energy plants and sources in Utah that began operation after October 1, 2000, and the MW of installed nameplate capacity for each of these resources. Renewable energy credits will be granted at a rate of 2.5 tons per MW, and will accumulate from the beginning of the facility's operation. Their use in any control period is limited to no more than five percent, systemwide, of the existing available allowances, as provided in paragraph E.3.a(2)(f) of this plan.

(e) Historical SO₂ emissions data for all Category 1 sources for the purposes of calculating the reducible allocation.

(i) For utilities, the average of the years 2000 – 2002. Another time period may be used for individual emission units, if needed, to be representative of normal operating conditions.

(ii) For non-utilities, the average of annual SO₂ emissions for the years 1996 and 1998.

(f) Changes due to enforcement actions or settlement agreements as a result of enforcement actions. The adjustment will be determined in accordance with paragraph E.1.c.(3)(c) of this Implementation Plan. The difference between the WEB source's allocations prior to enforcement and after the enforcement action will be removed from the allocation pool.

(2) Compiled Allocation Report.

The TSA will compile the information provided by all participating states and tribes into a draft regional allocation report, and will submit this draft regional report to the executive secretary and all participating states and tribes for review and comment thirty days after receiving the preliminary allocation reports. The draft regional allocation report will include a proposed budget for each state and tribe and the proposed allocation for each WEB source in Utah.

The following methodology for calculating the proposed ~~state and tribal budgets regional allocation for utilities and non-utilities~~ is based on the assumption that the states of Arizona, Oregon, New Mexico, Utah and ~~Wyoming~~ are the only participating states in the WEB Trading Program. These 5 states are actively pursuing a SIP under section 309 of the Regional Haze Rule and it is unlikely that any other states will be able to develop a SIP under section 309 by the deadline of December 31, 2003. ~~The State of Utah will work closely with the other four states that are developing 309 SIPs to ensure that the regional allocation is distributed consistently and fairly and to address any change in status that may affect this process. If any of these 5 states do not submit a SIP under section 309, or if the Environmental Protection Agency disapproves any of the 5 SIPs, then the State of Utah will submit a SIP revision within one year to adjust this allocation methodology to reflect actual participation in the Sulfur Dioxide Milestones and Backstop Trading Program.~~ Tribal nations may participate in the program at a later date under the provisions of the Tribal Authority Rule. There are currently four category 1 sources operating on tribal lands under the jurisdiction of three tribal nations. The following methodology will remain unchanged if any of these tribal nations opt in to the program at a later date because the allocation for any of the four existing tribal sources will be covered by the opt-in adjustment for the tribe, and the allocation for any new sources will be covered by the regional new-source set-aside.

(a) Table 6 shows the calculation of the available allocation for existing sources. The base milestone for the 5-state region calculated in accordance with paragraph E.1.a(2) of this plan is the starting point. The base milestone does not include the smelter set-aside. 20,000 tons of SO₂ is then subtracted for a tribal set-aside.

NOTE: If either the BHP San Manuel or Hidalgo Smelter resumes operations, the milestone adjustment calculated in paragraph E.1.a(3) of this Plan will be the allocation for that smelter, and will be in addition to the allocations determined from the base milestone as outlined in this subsection. References to the non-utility allocation throughout the remainder of Part E will not include the potential allocation to either of these suspended smelters.

Table 6. Utility/Non-utility Split.

	Base Milestone from Table 2	Tribal Set-Aside	New Source Set-aside	Remaining Allocation	Utility Portion	Non-utility portion
2003	446,904	20,000	6,390	420,514	275,027	145,488
2004	446,904	20,000	6,390	420,514	275,027	145,488
2005	446,904	20,000	6,390	420,514	275,027	145,488
2006	446,904	20,000	6,390	420,514	275,027	145,488
2007	446,904	20,000	6,390	420,514	275,027	145,488
2008	447,014	20,000	12,902	414,112	275,636	138,476
2009	447,123	20,000	12,902	414,221	275,708	138,513
2010	447,333	20,000	12,902	414,331	275,782	138,549
2011	447,333	20,000	12,902	414,331	275,782	138,549
2012	447,333	20,000	12,902	414,331	275,782	138,549
2013	435,455	20,000	19,370	396,085	259,171	136,914
2014	423,676	20,000	19,370	384,306	251,463	132,843
2015	411,898	20,000	19,370	372,528	243,757	128,771
2016	411,898	20,000	19,370	372,528	243,757	128,771
2017	411,898	20,000	19,370	372,528	243,757	128,771
2018	309,087	20,000	19,370	269,717	155,367	114,350

(b) Table 7 shows the new source set-aside for the 5-state region.

(i) The new source set-aside is calculated by subtracting the new source set-aside adjustment listed in Table 7 for all states and tribes that do not have a federally approved Implementation Plan for the WEB trading program under 40 CFR 51.309 as of the program trigger date from the maximum possible set-aside for each of the first five years of the trading program.

Table 7. New Source Set-Aside Adjustment

	2003 - 2007	2008 - 2012	2013 - 2018
Maximum Possible Set-Aside	9,000	18,000	27,000
State or Tribe	Adjustment (tons/yr SO₂)		
1. Arizona	1,757	3,596	5,437
2. California	559	1,039	1,532
3. Colorado	1,480	2,945	4,364
4. Idaho	270	496	721
5. Nevada	302	618	1,011
6. New Mexico	1,267	2,512	3,889
7. Oregon	393	795	1,075
8. Utah	640	1,293	1,949
9. Wyoming	2,333	4,706	7,020
10. Tribes	No adjustment needed	No adjustment needed	No adjustment needed

(ii) Subtract the floor allocation for all WEB sources in the region that were identified as Category 2 from the new source set-aside for the 5-state region to determine the available allocation for new sources that begin operation after the program trigger date. The allocation process for these new sources is described in Part E.3.c of this plan.

Example calculation of the new source set-aside.

The example uses the following assumptions:

- (i) Emissions exceed the milestones based on an average of the years 2003-2005.
- (ii) The program trigger date is March 31, 2007.
- (iii) The first 5 years of the program are 2011-2015.
- (iii) Five states are participating in the program (AZ, NM, OR, UT, WY).
- (iv) New sources that commenced operation between January 1, 2003 and the program trigger date have a total floor allocation of 6,000.

	2011	2012	2013	2014	2015
Maximum Possible Set-Aside	18,000	18,000	27,000	27,000	27,000
5-State Adjustment	- 5,098	-5,098	-7,628	-7,628	-7,628
Floor for Category 2 Sources	-6,000	-6,000	-6,000	-6,000	-6,000
Remaining New Source Set-aside	6,902	6,902	13,372	13,372	13,372

(c) The remaining allocation shown in Table 6 is available for distribution to category 1 sources. The final two columns in Table 6 split this remaining allocation into a utility allocation and a non-utility allocation.

(d) Subtract the floor allocations for all category 1 utility and non-utility sources in the region from the utility allocation or the non-utility allocation.

(e) Calculate the early reduction allocation.

(i) Divide the number of certified early reduction credits for all WEB sources in the region by ten.

(ii) Add the utility allocation for 2018 to the non-utility allocation for 2018 and then multiply this total by 0.05.

(iii) If the product of paragraph (i) is no more than the product of paragraph (ii), the product of paragraph (i) is the early reduction allocation, and each source is allocated ten percent of its early reduction credits.

(iv) If the product of paragraph (i) is more than the product of paragraph (ii), the early reduction allocation for the region is the product of paragraph (ii). To determine a source's allocation, divide the product of paragraph (ii) by 0.10 times the total number of early reduction credits and apply that ratio to the early reduction credits claimed by the source.

(v) Split the regional early reduction allocation based on the ratio of utility to non-utility allocations in 2018 and subtract the early reduction allocation from the utility and non-utility allocation totals.

(vi) The early reduction allocation will be calculated in a similar manner for the second five-year allocation period under this program, and will then be discontinued for any future allocation periods.

(f) Calculate the regional renewable energy allocation.

(i) Add together the reported MW of installed nameplate capacity for renewable energy facilities reported by the participating states and tribes, and then multiply this number by 2.5.

(ii) Add the utility allocation for 2018 to the non-utility allocation for 2018 and then multiply this total by 0.05.

(iii) If the product of paragraph (i) is no more than the product of paragraph (ii), the product of paragraph (i) is the renewable energy allocation.

(iv) If the product of paragraph (i) is greater than or equal to the product of paragraph (ii), the renewable energy allocation for the region is the product of paragraph (ii). To determine a source's allocation, divide the product of paragraph (ii) by the total number of renewable energy credits and apply that ratio to the early reduction credits claimed by the source.

(v) Split the regional renewable energy allocation based on the ratio of utility to non-utility allocations in 2018 and subtract the renewable energy allocation from the utility and non-utility allocation totals.

(g) Any remaining allowances in the utility allocation or the non-utility allocation after subtraction of the early reduction allocation and the renewable energy allocation is considered the reducible allocation and will be assigned to Category 1 sources.

(i) For non-utility sources, add together the historic SO₂ emissions in accordance with paragraph E.3.a(1)(e) of this plan for all Category 1 non-utility sources in the region to determine an historic emission total. Determine a percent contribution of SO₂ emissions for each WEB source to the historic emission total. Multiply the non-utility reducible allocation by the percent contribution for each WEB source to determine a reducible allocation for each WEB source.

(ii) For utility sources, the reducible allocation will be distributed to sources that emitted above their floor in the baseline period (2000 through 2002) based on their percentage of total floor emissions for sources emitting above the floor times the number of reducible allowances available for the first five years of the WEB Trading Program. The number of allowances for any source receiving a reducible allocation will not exceed a recent historic its emission rate in the baseline period times its heat input at an 85% nameplate capacity factor a heat input that represents a realistic upper bound for the unit.

[Note: The approach for distributing the reducible utility allocation described above is designed to address equity issues regarding the allocation process for utilities. The State of Utah is participating in ongoing discussions with the other participating states, tribes and regional stakeholders to ensure that all equity issues have been addressed. The principles and equity issues that are under discussion are listed in paragraph E.3.a.(1)(b)(ii) of this plan.]

((i)) Add together the floor allocation, early reduction allocation, renewable energy resource allocation, and reducible allocation for each WEB source and each renewable energy source to determine the proposed allocations for the first five years of the WEB Trading Program.

(j) Add together the proposed allocations for all of the WEB sources in the jurisdiction of each participating state and tribe to determine a draft SO₂ allowance budget for each state and tribe.

(3) Public Comment Period. The executive secretary will publish notice of availability of the draft regional allocation report in newspapers of general circulation throughout Utah. A 30-day public comment period will be established, and a hearing will be held during the comment period. The executive secretary will consider the comments, and will revise the draft report as needed.

(4) Proposed Changes Submitted to Tracking System Administrator. The executive secretary will submit proposed changes to the budget and source allocations to the TSA within sixty days of receipt of the draft regional allocation report.

(5) Compilation of Changes. The TSA will compile the proposed changes and will submit a final draft regional allocation report to the executive secretary for approval within 30 days of receipt of the recommended changes.

(6) Final Regional Allocation Report. The executive secretary will review the final

regional allocation report and will determine the budget for Utah and allocations for WEB sources within Utah in accordance with the provisions of this plan within thirty days of receipt of the final draft allocation report. The executive secretary will submit the budget and allocations for all WEB sources in Utah to EPA, and will notify the TSA that the WEB source allocations should be recorded in the allowance tracking system.

(7) The executive secretary will notify all WEB sources within Utah of the number of allowances that have been recorded in their compliance account. The notice will include a warning to the WEB sources that reported annual sulfur dioxide emissions may change due to the implementation of new monitoring methods as required by R307-250-9. Allocations for the first five years of the program will not be adjusted to account for changes due to the new monitoring method. However, allocations during the next five-year distribution will be adjusted as needed to account for paper changes in emissions due to changes in monitoring methodology.

b. Distribution of Allowances for Future Control Periods

By December 1 of the year five years after the initial allocation, the executive secretary will follow the process outlined in paragraph E.3.a of this plan to distribute allowances for the next five-year period. This process will continue every five years until allowances have been allocated through the year 2018.

c. Distribution of the New Source Allocation

(1) The new source set-aside will be available for two categories of sources.

(a) A new WEB source is eligible to receive an annual floor allocation equal to the lower of the annual sulfur dioxide limit in the source's approval order, or sulfur dioxide annual emissions calculated based on a level of control equivalent to BACT and assuming 100% utilization of the WEB source, beginning with the first full calendar year of operation and in accordance with the provisions of R307-250-7(6).

(b) An existing WEB source that has increased production capacity after obtaining a new approval order issued under R307-401 is eligible to receive an allocation from the new source set-aside equal to:

(i) the permitted annual sulfur dioxide emission limit for a new unit; or

(ii) the permitted annual SO₂ emission increase for the WEB source due to the replacement of an existing unit with a new unit or the modification of an existing unit that increased the production capacity of the WEB source.

Permitted emission increases due to fuel switching or other process changes that are not directly related to increased production capacity are not eligible for allocations from the new source set-aside. The allocation from the new source set-aside in the first year of operation will be adjusted to account for the number of days that the source is operating in that first year.

EXAMPLE. A new unit with a nameplate capacity of 400 MW is constructed at a power plant with two existing units with nameplate capacities of 400 MW and 300 MW. The two existing units install SO₂ controls and reduce emissions to meet PSD requirements for the construction of the new unit. In this example, the source would continue to receive a floor and a reducible allocation for each of the existing units, and would also be eligible to receive an allocation from

the new source set-aside for the new unit. Even though total SO₂ emissions will decrease at this plant due to the construction of the new unit, the allowances allocated to the source will increase to reflect the increase in production capacity of 400 MW of electricity. If the new unit comes on line on July 1 the allocation for the first year will be reduced by 50 percent because the unit was operational for half of the year.

(2) Allocations from the new source set-aside will remain constant for the applicable WEB source and will be made on an annual basis by March 31 of each year for the current control period. When the next five-year allocation block is distributed as outlined in paragraph E.3.b of this plan, all sources with an allocation under the new source set-aside will receive a five-year allocation block from the new source set-aside, and will continue to receive this allocation in future five-year allocation blocks.

(3) Owners or operators of new WEB sources or modified WEB sources that meet the eligibility requirements of (1) may apply for an allocation from the new source set-aside by submitting a written request to the executive secretary as outlined in Subsection R307-250-7(6).

(4) The executive secretary will review the application for an allocation for accuracy and completeness, and will notify the source of intent to distribute allocations from the regional new source set-aside pending verification that allowances are available in the new source set-aside account. The executive secretary will then forward the request to the TSA.

(5) The TSA will document the date that the request is received by the TSA. Requests for allocation of allowances from the new source set-aside will be processed in the order received. The TSA will deduct the number of allowances requested from the regional new source set-aside that was established by the participating states and tribes, and will then record an equal number of allowances in the source's compliance account for each remaining year of the five-year period. The TSA will then send written notification to the source and to the executive secretary that the allowances have been recorded in the source's compliance account.

(6) If there are insufficient allowances remaining in the new source set-aside to fulfill the request, the source must purchase the allowances required to demonstrate compliance. Any eligible WEB source that does not receive an allocation from the new source set-aside because the set-aside was depleted will be first in line to receive an allocation when the new source set-aside is increased in the next five-year period as outlined in Table 7 of this plan. If there is more than one such source, their allocation requests will be processed in the order they were received by the TSA.

(7) A source that has received a retired source exemption and continues to receive an allocation as a retired WEB source is not eligible to receive an allocation from the new source set-aside.

d. Regional Tribal Set-aside

(1) Each year after the program is triggered, 20,000 allowances will exist as a tribal set-aside.

(2) The tribal caucus of the WRAP has stated its intent to determine the means for distributing the allowances among the tribes within one year after the program trigger date. The executive secretary understands that there will be a process that will meet the tracking and data

security requirements of the allowance tracking system by which a tribe will move its set-aside allowances into the trading program for the purposes of trading.

(3) The executive secretary recognizes that the tribal set-aside allowances are bonus allowances for the tribes and, as such, are separate and additional to any allowances included in a tribal budget or the new source set-aside as outlined in the allocation report that is prepared in accordance with paragraph E.3.a(6) of this plan.

e. Opt-in Sources

The WRAP Market Trading Forum has recommended including provisions in this plan that would allow smaller sources to opt in to the program. Opt-in sources may provide a more cost-effective way to reduce overall regional SO₂ emissions, and therefore may strengthen the market incentives of this program. While the benefits of allowing sources to opt in to the program are important, the program must also provide safeguards to ensure that the integrity of the program is not affected. For example, it would be counterproductive to allow sources that were already planning to shut down to opt in to the program and then sell allowances to an existing source. In this example, regional emissions could slowly creep upward in a manner that is not consistent with the goals of the SO₂ milestones.

The State of Utah is deferring inclusion of provisions for opt-in sources until a future SIP revision to allow time to thoroughly consider how to provide the flexibility and potential benefits to the market by expanding the program while also ensuring that the SO₂ emission reduction goals are maintained.

f. WEB Allowance Tracking System (WEB ATS)

Subsection 40 CFR 51.309(h)(4)(v) requires a centralized system for the tracking of allowances and emissions. The centralized system will be referred to as the WEB Allowance Tracking System (WEB ATS or ATS). The WEB ATS must provide that all necessary information regarding emissions, allowances, and transactions is publicly available in a secure, centralized database. The ATS must ensure that each allowance is uniquely identified, allow for frequent updates, and include enforceable procedures for recording data.

The executive secretary will work cooperatively with other states and tribes participating in the WEB Trading Program to design this system. The executive secretary will be responsible for ensuring that all the ATS provisions are completed as described in this plan.

The ATS will not exist unless the program is triggered. Prior to the implementation of the WEB Trading Program, a separate emissions tracking database will be employed to track the ongoing emissions of sources emitting SO₂ at amounts equal to or greater than 100 tons per year. The emissions tracking database, which was used to track and measure SO₂ emissions against the milestones, will still exist once the WEB Trading Program is triggered; however, it will become incorporated into the SO₂ Allowance Tracking System. Both the emissions tracking database and the ATS will be centralized systems and data will be posted in an electronic, Web-based program and available to all persons.

The participating states and tribes will contract with a common TSA to service and maintain the WEB ATS. It is envisioned that the ATS will require the use of a contracted consultant or database design engineer to create a secure, efficient and transparent tracking system. Because the ATS will be utilized by all states and tribes participating in the program, the

design will require a uniform approach and level of security that will satisfy regional needs and concerns as well as meet the electronic, Web-based, access needs and security provisions. Due to the dynamic needs of the marketplace, the ATS will require a database that will reflect the current status of allowances and allowance transactions. The ATS will be operational within one year after the program trigger date.

Specifications of the WEB ATS such as emissions tracking, the recording of allowance transactions, account management, system integrity and transparency are outlined in the Utah TSD Supplement. The specifications will be used as a guideline for developing the ATS if the program is triggered. However, the overall design will be greatly affected by computer software and hardware changes that will occur between the adoption of this Plan and the program trigger date. The on-going experience gained from other trading programs also may lead to improvements in the design of the system. The specifications and related sections of R307-250 detail how a WEB source will register for the ATS and how the source will, through an account representative, establish accounts, transfer allowances, and track unused allowances from a previous year.

Neither the executive secretary nor the TSA will adjudicate any dispute between the parties concerning the authorization of any account representative with regard to any representation, action, inaction, or submission of the account representative.

As an example of how the WEB ATS will generally function, once the WEB Trading Program is triggered, a WEB source will have its allowance allocation determined. At the same time, the WEB source's account representative will register for the ATS under R307-250-6, and a compliance account will be established under R307-250-8. Each allowance will be assigned a serial number. The allowance serial number will be used by the WEB ATS to track allowance allocations, transfers (R307-250-10), and deductions, and to account for any unused allowances from a previous year (R307-250-11). The serial number also will be assigned to each allowance recorded in a general account, which is an account for allowances that are not held to meet program compliance requirements. Furthermore, the ATS will track tribal allowance set-asides and new source allowance set-asides not yet assigned to either a compliance or general account.

It is important to note that while this plan has provided a design for and an operational understanding of the ATS, the components of the ATS will need to be examined and possibly altered upon each required SIP revision.

g. Allowance Transfers

(1) 40 CFR 51.309(h)(4)(viii) requires the Plan to include provisions detailing the process for transferring allowances between parties. Transfers are defined as the conveyance from one account to another account (compliance account or general account) of one or more allowances by whatever means, including but not limited to purchase, trade, or gift in accordance with the procedures established in R307-250-10. This includes the transfer of allowances for the purpose of retirement. Once an allowance is retired, it is no longer available for transfer to or from any account. Allowances may be purchased by any person for the purpose of retirement.

(2) The TSA will have specific recording duties involving transfers. These required procedures will be detailed in the service contract and will include the following activities.

(a) Recording of Allowance Transfers.

(i) Within five business days of receiving an allowance transfer, except when the transfer does not meet the requirements of R307-250-10, the TSA will record an allowance transfer by moving each allowance from the transferor account to the transferee account as specified by the request, provided that the transfer is correctly submitted and that the transferor account includes each allowance identified in the transfer.

(ii) Any allowance transfer that is submitted for recording following the allowance transfer deadline and that includes any allowances allocated for a control period prior to or the same as the control period to which the allowance transfer deadline applies will not be recorded until after completion of the compliance account reconciliation.

(iii) Where an allowance transfer submitted for allowance transfer recording fails to meet the requirements of R307-250-10, the TSA will not record the transfer.

(2) *Notification of the Recording of Allowance Transfers.* The TSA has specific responsibilities involving the notification of the recording of any transferred allowances, including the failure to record any transfer of allowances. Again, these required procedures will be outlined in the service contract, but include the following.

(a) Within five business days of the recording of an allowance transfer, the TSA will notify the transferor's and transferee's account representatives of both accounts, and make the transfer information publicly available on the Internet.

(b) Within five business days of receipt of an allowance transfer that fails to meet the requirements of R307-250-10, the TSA will notify the account representatives of both accounts of the decision not to record the transfer, and the reasons for not recording the transfer.

h. Use of Allowances from a Previous Year

(1) *Background.* 40 CFR 51.309(h)(4)(ix) allows states to include in the plan provisions for the accounting of unused allowances from a previous year. The unused allowances may be kept for use in future years in accordance with R307-250-11 and there are restrictions on the use of the allowances in accordance with R307-250-11. The federal rule also requires that allowances kept for use in future years may be used in calendar year 2018 only to the extent that the plan guarantees that such allowances will not interfere with the achievement of the 2018 milestone as outlined in Table 3 of this plan, adjusted according to the provision of paragraphs E.1.a(2) and (3) of this Plan. R307-250-11 addresses this by prohibiting the use after the year 2017 of allowances allocated for the years 2003 – 2017. This provision ensures that actual emissions will be less than the 2018 milestone because only allowances allocated for the year 2018 could be used to show compliance in that year. The provision also maintains flexibility by resetting the baseline to the year 2018 and then allowing sources to once again use extra allowances to show compliance in any future year. This flexibility is important for sources that have variable operations because the source may build up a reserve of unused allowances for use in a high production year.

The Annex explains the benefits of allowing the WEB source to use unused allowances from previous years, including increased flexibility and early reduction stimulus. The risk in allowing the use of allowances carried from a previous year could be an increase in emissions in later years as the unused allowances are withdrawn for compliance.

Because the regional haze SIP is based on reasonable progress requirements related to the remedying or prevention of any future visibility impairment, it is important to assure the use of these allowances will not interfere with attainment or maintenance of any reasonable progress goals. The safeguard employed here to mitigate this type of risk is termed, “flow control”, and is described in paragraph (2) below.

(2) Flow Control Provisions.

(a) At the end of each control period, WEB sources may transfer allowances in and out of their compliance account for a period of 60 days to ensure that the account will contain enough allowances to cover sulfur dioxide emissions during the previous year. At the end of the sixty-day transfer period, allowances will be deducted from the compliance account of each WEB sources in an amount equal to the sulfur dioxide emissions of that source during the control period.

(b) After the deductions have been completed, the Tracking System Administrator will perform the following calculations and prepare a report according to paragraph E. 3.k(1)(b) of this Plan.

(i) Determine the total number of allowances remaining in the allowance tracking system that were allocated for the just completed control period and all previous control periods.

(ii) If the number calculated in (i) exceeds 10 percent of the milestone for the next control period, then the flow control procedures in R307-250-11 will be triggered for that next control period. These flow control provisions will discourage the excessive use of allowances that were allocated for an earlier control period without establishing an absolute limit on their use. WEB sources will maintain the option to use allowances allocated for an earlier control period, but will be required to use two allowances for each ton of SO₂ emissions. Flow Control operates as follows.

(A) The flow control ratio will be calculated by multiplying 0.1 times the milestone for the next control period, divided by the total number of unused allowances remaining in the system.

(B) To calculate the number of prior-year allowances that can be used without restriction by a source for the next control period, the TSA will multiply the prior-year allowances by the flow control ratio. The resulting number of allowances may be used on a one-to-one ratio to show compliance with the source’s emission limitation as outlined in paragraph E.3.j of this Plan.

(C) The remaining prior-year allowances may be used on a two-to-one ratio to show compliance. Thus, WEB sources will maintain the option to use allowances allocated for an earlier control period,

but will be required to use two of those allowances for each ton of SO₂ emissions.

Example: On March 1, 2010 (the compliance transfer deadline for the 2009 control period) the Tracking System Administrator deducts allowances from the compliance account for each WEB source to cover 2009 SO₂ emissions from that source. After completing these deductions, the TSA reports the following information:

Total number of allowances still in the system		
for the years 2003 – 2009	=	75,000
2010 milestone (5-state, no smelter)	=	508,223
Percent of milestone	=	14.75 %

Because the number of allowances not used in previous control periods is greater than 10% of the milestone, flow control procedures are triggered. In the annual report required in paragraph E.3.k of this Plan, the TSA will then calculate the flow control ratio for 2010:

$$\begin{aligned} 0.1 \times 2010 \text{ Milestone} \div \text{prior year allowances} &= \text{flow control ratio} \\ 0.1 \times 508,223 \div 75,000 &= 0.67 \end{aligned}$$

On March 1, 2011 (the compliance transfer deadline for the 2010 control period) the TSA will apply the 2010 flow control ratio before deducting allowances from each WEB source's compliance account

WEB Source A		
2010 Allowances	=	1,000
Remaining Prior Year Allowances	=	500
2010 Emissions	=	1,400

In this example, the TSA would multiply the prior year allowances by 0.67 to determine the number of prior year allowances that could be used without restriction, at a one-to-one ratio. This would equal 335. The remaining prior year allowances would then be used at a 2:1 ratio. 130 allowances would be needed to cover the remaining 65 tons of SO₂ emissions. The TSA would therefore deduct a total of 1,465 allowances (1,000 + 335 + 130) to cover 1,400 tons of SO₂ emissions.

i. Monitoring/Recordkeeping

(1) For WEB sources subject to 40 CFR Part 75, the TSA will use data that has been quality assured and finalized by the EPA. For WEB sources subject to the monitoring protocol in Appendix E of this Plan, the executive secretary will quality assure and finalize the data in accordance with these provisions for submission to the TSA.

(2) The executive secretary will verify and submit the data to the emissions tracking database as soon as reasonably feasible after annual emissions are reported by the WEB sources. These timelines will be modified, as necessary, according to the monitoring protocols.

(3) *Special Reserve Compliance Accounts.* The WEB Trading Program requires most WEB sources to install continuous emission monitoring systems (CEMS) that meet the monitoring, recordkeeping and reporting requirements of 40 CFR Part 75. However, there are some emission units that are not physically able to install CEMS and there are also emission units that do not emit enough sulfur dioxide to justify the expense of installing these systems. The WEB Trading Program allows these emission units to continue to use their pre-trigger monitoring methodology, but does not allow the WEB source to sell any allowances that were allocated to that unit for use by another WEB source. The restriction on selling these allowances is needed to ensure that an emission reduction of sulfur dioxide that leads to a sale of allowances is equal to the corresponding increase in sulfur dioxide from the source that buys the allowances. The allowances associated with emission units that continue to use their pre-trigger monitoring methodology are placed in a special reserve compliance account, while allowances for other emission units are placed in a regular compliance account. Allowances may not be traded out of a special reserve compliance account, even for use by emission units with CEMS at the same WEB source. However, the WEB source may transfer allowances into the account as needed to demonstrate compliance with the WEB source's allowance limitation.

R307-250-9(b) allows WEB sources with any of the following emission units to apply to establish a special reserve compliance account:

- (a) any smelting operation where all of the emissions from the operation are not ducted to a stack; or
- (b) any flare, except to the extent such flares are used as a fuel gas combustion device at a petroleum refinery; or
- (c) any other type of unit without add-on sulfur dioxide control equipment, if the unit belongs to one of the following source categories: cement kilns, pulp and paper recovery furnaces, lime kilns, or glass manufacturing.

The emission units described in (a) and (b) cannot physically be monitored using a CEM. The emission units described in (c) do not typically have add-on controls for sulfur dioxide. These units are expected to operate within their floor-level allocation and therefore will not be affected by the market, unless they make a process change and wish to sell allowances on the market. Other sources that are currently emitting sulfur dioxide above their expected allocation will either need to purchase allowances or install sulfur dioxide controls, and it is therefore important that these emission units have an accurate monitoring methodology that is comparable to other sources in the program.

The executive secretary will review the application to monitor under R307-250-9(1)(b). If the emission units meet the criteria in R307-250-9(1)(b), the executive secretary will determine the portion of the WEB source's allocation that is associated with the emission units that will be monitored under R307-250-9(1)(b) and will require the TSA to record that portion of the WEB source's allocation in the special reserve compliance account. The executive secretary will use the methodology for determining allocations described in paragraph E.3.a of this Plan to determine the portion of the allocation that is associated with the Subsection R307-250-9(1)(b) emission units. The executive secretary will notify the WEB source that the application has either been accepted or rejected, including a notification of the allowances that are to be recorded in the WEB source's regular compliance account and the new special reserve compliance account.

If an emission unit that is monitored under R307-250-9(1)(b) is permanently retired, the TSA will transfer the portion of allowances that were associated with that emission unit from the WEB source's special reserve compliance account to the source's compliance account. These allowances will then be available for use or sale by the WEB source. The allowances will be transferred after the compliance deduction has taken place for the last control period that the unit was in operation.

j. Compliance and Penalties

(1) *Compliance.* When a WEB source exceeds its allowance limitation, the executive secretary will require the TSA to deduct allowances from the following year's allocation in an amount equal to two times the WEB source's emissions of SO₂ in excess of its allowance limitation. This deduction will be made from the WEB source's compliance account after deductions for compliance are made under R307-250-12. If sufficient allowances do not exist in the compliance account for the next control period to cover this amount, the executive secretary will require the TSA to deduct the required number of allowances, regardless of the control period for which they were allocated, whenever the allowances are recorded in the account.

(2) *Penalties.* The amount of the financial penalty will be evaluated at each five-year SIP review, and adjusted to ensure that penalties per ton exceed the expected cost of allowances to ensure that this remains a stringent penalty. R307-250 establishes a penalty of \$5,000 per ton for each ton of emissions above the source's allowance limitation. This amount is in addition to the two allowances from the next year's allocation to be deducted from the account for each one allowance of exceedance. For a violation of any provision of the market trading program, each day of the control period is a separate violation under Utah's rule, and each ton of excess emissions is a separate violation. More details on liabilities for different provisions can be found in R307-250.

(3) *Smelter Specific Set-aside.* Each year, Kennecott Utah Copper (KUC) may submit data to the executive secretary demonstrating that sulfur input and emissions are greater than the baseline levels listed in Table 5 of this Plan. If the executive secretary determines that the criteria in paragraph E.1.a(3)(d) have been met, the executive secretary will require the TSA to record additional allowances in KUC's compliance account to cover the smelter specific set-aside. The allowances will be recorded prior to the allowance transfer deadline to ensure that KUC may use the additional allowances to demonstrate compliance with its allowance limitation.

k. Periodic Evaluation of the Trading Program

(1) *Annual Report.*

(a) Beginning one year after compliance with the trading program is required, the executive secretary will obtain from the TSA an annual report that contains the following information:

- (i) the level of compliance program-wide;
- (ii) a summary of the use and transfer of allowances, both geographically and temporally;
- (iii) a source-by-source accounting of allocations compared to emissions;

(iv) a report on the use of unused allowances from a previous year, in order to determine whether these emissions have or have not contributed to emissions in excess of the cap; and

(v) the total number of WEB sources participating in the trading program and any changes to eligible sources, such as retired sources, or sources that emit more than 100 tons of SO₂ after the program trigger date.

(b) Within 2 months after the allowance transfer deadline for each control period when compliance with the trading program is required, the TSA will prepare a draft report that lists:

(i) the total number of allowances deducted for the control period,

(ii) the total number of allowances remaining in the Allowance Tracking System allocated for that control period and any earlier control period,

(iii) a proposed determination that flow control procedures have either been triggered or have not been triggered for the next control period, and

(iv) if flow control procedures have been triggered, a draft flow control ratio calculated according to paragraph E.3.h(2) of this Plan.

(c) The executive secretary will evaluate the draft report, and will propose a determination that flow control procedures either have been triggered or have not been triggered for the next control period.

(d) The executive secretary will publish a notice of availability of the draft report in newspapers of general circulation in Utah, and will hold a 30-day public comment period.

(e) After the comment period the executive secretary will make a final determination that the flow control procedures either have been triggered or have not been triggered for the next control period. If the flow control procedures have been triggered, the executive secretary will notify all WEB sources in Utah that flow control procedures will be in effect during the next control period.

(2) Five-year Evaluation.

(a) The executive secretary will work cooperatively with other participating states and tribes to conduct an audit of the WEB Trading Program no later than three years following the first full year of the trading program, and at least every five years thereafter. This evaluation does not replace the Plan assessments in 2008, 2013, and 2018. The evaluation will be conducted by an independent third party and include an analysis of:

(i) whether the total actual emissions could exceed the values in Table 3 of this Implementation Plan of the WEB Trading Program even though sources comply with their allowances;

(ii) whether the program achieved the overall emission milestone it was intended to reach;

- (iii) the effectiveness of the compliance, enforcement and penalty provisions;
- (iv) a discussion of whether states and tribes have enough resources to implement the WEB Trading Program;
- (v) whether the trading program resulted in any unexpected beneficial effects, or any unintended detrimental effects;
- (vi) whether the actions taken to reduce sulfur dioxide have led to any unintended increases in other pollutants;
- (vii) whether there are any changes needed in emissions monitoring and reporting protocols, or in the administrative procedures for program administration and tracking;
- (viii) the effectiveness of the provisions for interstate trading, and whether there are any procedural changes needed to make the interstate nature of the program more effective; and
- (ix) the integrity of the emissions and allowance tracking system, including whether the procedures for recording transactions are adequate, whether the procedures are being followed and in a timely manner, whether the information on sources' emissions are accurately recorded, whether the emissions and allowance tracking system has procedures in place to ensure that the transactions are valid, and whether back-up systems are in place to account for problems with loss of data.

- (b) The public will have an opportunity to participate in this trading program evaluation.
- (c) In the event that any audit results in recommendations for program revisions, the State of Utah, in consultation with the WRAP, will make appropriate modifications to this Plan. The State of Utah will revise this Plan if the program is not meeting its emission reduction goals.
- (d) The executive secretary will submit a copy of the report to the EPA regional office.

I. Retired Source Exemption

R307-250-4(4) outlines the procedure that a WEB source must follow to receive a retired source exemption. The exemption would allow the source to continue to receive an allocation, but would exempt the source from monitoring and recordkeeping requirements that would serve no useful function for a source that has ceased operations. The executive secretary will notify the source of its obligation to apply for a retired source exemption upon the cancellation or relinquishment of a permit.

To receive a retired source exemption, the source must submit a request for the exemption to the executive secretary. The executive secretary will review this request, and within 60 days of receipt of the request will notify the source that the retired source exemption has been granted or has been rejected. If the exemption has been rejected, the notification will contain an explanation of the reasons for rejecting the request.

The TSA will continue to record an allocation to a WEB source that has received a retired source exemption. However, the allowances will be recorded in a general account rather than a compliance account for the source. The TSA will transfer any existing allowances in the retired source's compliance account or special reserve compliance account into the general account for the retired source, and will close the compliance accounts.

A WEB source that is permanently retired and that does not request a retired source exemption will forfeit all abandoned allowances in that source's compliance account, as outlined in R307-250-4(4)(e). The forfeited allowances will not be redistributed to other sources, and will be permanently retired from the Allowance Tracking System, as outlined in R307-250-10(3). During the next five-year allowance distribution period the retired source will not receive an allocation, and the allowances that would have been distributed to that source will be added to the new source set-aside.

m. Integration into Permits

40 CFR 51.309 requires that the requirements for emissions reporting and for the trading program be incorporated into a permit that is enforceable as a practical matter by EPA and by citizens to the extent permitted by the Act. It is expected that all WEB sources at least initially will be subject to Utah's Title V permitting requirements. Under R307-415, Utah's delegated Title V permitting program, the pre- and post- trigger requirements of the market trading program fall under the definition of "applicable requirement," and will be incorporated into each source's Title V permit according to the schedules and procedures contained in that rule. R307-250-14 requires that any source that for any reason and at any time is not required to have a permit under R307-415 must obtain a New Source Review permit pursuant to R307-401 et seq. that incorporates the same requirements by submitting a Notice of Intent within 90 days of the program trigger. Both types of permits are enforceable both federally and by citizens pursuant to Utah's SIP.

4. 2013 SIP Revision; Backstop for Beginning of Second Planning Period

In addition to the requirements of 40 CFR 51.309(d)(10), the periodic SIP revision due in 2013 will include the following information:

- a. Source specific allocations for all WEB sources in Utah for the year 2018; and
- b. Either the provisions of a program designed to achieve reasonable progress for stationary sources of SO₂ beyond 2018 or a commitment to submit a SIP revision containing the provisions of such a program no later than December 31, 2016. The program will ensure that the requirements of 40 CFR 51.309 are achieved for the first planning period, including requirements that cannot be measured until after 2018, such as the determination of compliance with the 2018 milestone.

This 2013 SIP revision will provide certainty to sources regarding their potential liability under the special penalty provisions for the year 2018 outlined in paragraph E.1e of this Plan. The calculation of these allocations is delayed until 2013 to provide certainty about the number of sources that will qualify as WEB sources at that time; the allocations needed for new sources in the region, and the magnitude of renewable energy development and early reductions that will be included in the allocation process. It is difficult to estimate the impact of these factors in 2003

because circumstances may change during the next 10 years.

If the 2018 milestone is not met, the starting point for the next planning period will be the 2018 milestones, not actual emissions in 2018.